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HXR-NX70E

Compact Dust and Rain-proof Camcorder with 1/2.88-in Exmor R™ CMOS Sensor

Dust and rain proof professional HD camcorder

For journalists, documentary makers and anyone else who needs capture superb content whatever the conditions, the dust and rain-proof HXR-NX70E is the perfect compact camcorder.

In low light conditions, its Exmor R™ CMOS sensor delivers roughly double the sensitivity of conventional CMOS sensors, while an ultra-wide angle 26.3mm Sony G Lens™ lets you capture more of the action in close shooting situations. You can also 'geo-tag' your precise location with built-in GPS, while 96 Gigabytes of embedded Flash Memory provides up to 40 hours of storage capacity - ideal when operating in remote locations.

The exceptionally robust NX70 doesn't sacrifice picture quality however, with CinemaTone technology providing deeper, more film-like skin tones. And if you want precise, hands-on control there's a switchable lens ring for manual control of focus, iris and zoom functions.

The HXR-NX70 is suitable for producing content for international usage thanks to the latest 50p recording options. It can also shoot still images simultaneously with video using a Dual Rec function, providing complete on location flexibility.

This product comes with the full PrimeSupport package. That's fast, hassle-free repairs, a helpline offering expert technical advice, and a free loan unit while yours is repaired. Plus the peace of mind that Sony is looking after your equipment – and your business.

Features

Rain and Dust Proof Performance

You can be confident rainy or dusty shooting environments will not affect the reliable operation of the HXR-NX70E thanks to its IEC60529 IP54 rating. The camcorder's sealed body design makes sure that harmful sand and large dust particles do not get inside. A waterproof performance rating of IPx4 means that the main camera body is protected against rain showers and water splashes.

A waterproof performance rating of IPx4 means that the main camera body is protected against rain showers and water splashes. However, it should not be submerged underwater or sprayed with pressurised water from a tap or hose. When used with accessories such as an external microphone, a rain cover should be used to protect the accessory and connection. IP5x rating does not guarantee 100% protection against exposure to extremely fine particles.

Ultra-wide Angle 26.3mm G lens

Engineered for superior optical performance, Sony G lenses deliver brilliant, accurate colour reproduction and sharp, amazingly detailed images. In addition, the 26.3mm focal length offers a broader perspective than previous lenses for enhanced wide angle shooting so you can capture more of the scene when close in.

Assignable Lens Ring (Focus/Zoom/Iris)

Get the most out of your camcorder with enhanced manual controls. The assignable lens ring allows for manual adjustment of focus, iris, and zoom settings so you have complete creative control.

Optical SteadyShot image stabilisation with Active Mode

Optical SteadyShot image stabilisation with Active Mode provides superior compensation for camera shake to deliver stunningly smooth video from wide angle to full telephoto shooting. In addition, the innovative 3-Way Shake-Cancelling feature adds electronic roll stability for even smoother video capture.

Back-illuminated Exmor R CMOS sensor for superb low-light video

Journalists rarely shoot under studio lighting conditions and Sony's back-illuminated Exmor R™ CMOS sensor delivers stunning low-light sensitivity with improved image clarity and drastically reduced grain. Designed for compact cameras and camcorders, the Exmor R™ sensor relocates the photo diodes above the support circuitry, maximising the light gathering area per pixel so you can shoot with better results in low-light conditions. The sensitivity is roughly double

that of conventional CMOS sensors of the same size and pixel size.

1920 x 1080 Full HD 50p Recording with 12.3 Mega pixels still image capture

The compact HXR-NX70E shoots in Full High Definition quality (1920 x 1080) with a choice of 50p, 50i and 25p frame rates. It can also simultaneously shoot 12.3 Mega Pixel (4672 x 2628) still images (Note: Dual Rec is not active when recording mode is set to FX or PS.) It also supports playback via HDMI and compatible HDTV, for complete flexibility in reviewing your footage.

96GB* embedded Flash Memory for up to 40 hours of HD recording

Built-in Flash memory provides extra capacity, ideal when working remotely, as well as providing additional workflow options for back-up and sharing content. 96GB embedded Flash memory can record and store up to 40 hours of high definition video footage in HD LP mode.

* 96GB equals 96 billion bytes. A portion of the total storage is used for system management and/or application files.

3.5” touch-screen XtraFine™ LCD display (921K)

The large 3.5” (16:9) XtraFine LCD screen (921K) displays sharp, bright, vivid images, letting you compose a shot more easily and alter setting to best represent the scene, even when outdoors in bright lighting conditions.

XLR adaptor with selectable phantom power and shotgun microphone

The detachable handle has a compact, ergonomic design. Two balanced XLR audio inputs are built in with phantom power and attenuation options that professional shooters require for clean sound quality. Default audio settings for XLR recording are highlighted in green for easy reference in the field in order to reduce operator error under difficult lighting conditions.

The ECM-XM1 shotgun microphone mounted on top of the handle provides audio recording performance similar to larger shoulder-mounted ENG style cameras.

Geotagging with built-in GPS receiver

A built-in GPS receiver makes the HXR-NX70 an ideal choice for professional videographers. The receiver gives you the ability to “geo-tag” shooting locations - making it easy if you need to return to the same location or to create a log when surveying remote locations. Your locations can be tracked on Google maps and all GPS data can be extracted with a PC.

Additionally, the receiver automatically adjusts your camcorder’s clock to the proper time zone when international travel is part of your assignment.

Direct Copy to external HDD without PC

Store content or backup important shots by copying footage directly from your camcorder to an external hard disk drive (sold separately) without using a computer. The HXR-NX70E can also access videos stored on an external hard drive for playback on HDTV, allowing you to utilise the camcorder’s handy playback features.

Additional information: Direct Copy is compatible with USB media that meets the following requirements: USB 2.0 or higher and formatted in FAT32 file system. It is recommended that external HDD is AC powered. The HXR-NX70E must be connected to AC power when using Direct Copy. VMC-UAM1 cable is supplied to connect HXR-NX70 with USB media, however connection via USB hub is not supported. There may be cases when USB media is not compatible with the Direct Copy function.

Technical Specifications

General	
Mass	840 g (1 lb 13 oz) (w/Hood, w/Eye Cup) 1285 g (2 lb 13 oz) (w/Hood, w/Eye Cup, w/Battery, w/Microphone, w/XLR unit)
Dimension (W x H x D)	111.5 × 119.5 × 297.5 mm (4 1/2 × 4 3/4 × 11 3/4 inch) (w/Hood, w/Eye Cup) 135 × 174 × 384.5 mm (5 3/8 × 6 7/8 × 15 1/4 inch) (w/Hood, w/Eye Cup, w/Battery, w/Microphone, w/XLR unit)
Power requirements	8.4 V/6.8 V (AC adaptor / Battery)
Power consumption	3.5 W (w/ viewfinder - normal brightness (HD FX) 3.6 W (w/ LCD - normal brightness (HD FX)
Operating temperature	0 to +40 deg C (+32 to +104 deg F)
Storage temperature	-20 to +60 deg C (-4 to +140 deg F)
Continuous Recording Time	220 min (VF), 215 min (LCD)

Recording Section	
Recording format	Video Format HD: MPEG4-AVC/H.264 AVCHD format compatible (1080/50p: original format) STD: MPEG-2 PS Audio Format HD: Linear PCM/Dolby Digital 2ch, 16 bit, 48 kHz STD: Dolby Digital 2ch, 16 bit, 48 kHz
Recording frame rate (Due to variable bitrate, 24Mbps is the maximum bitrate for AVCHD FX mode and the average bitrate is being stated for FH, HQ and LP modes.)	HD PS (28 Mbps) 1920 x 1080/50p/16:9, HD FX (24 Mbps) 1920 x 1080/50i/16:9, HD FH (17 Mbps) 1920 x 1080/50i/16:9, HD HQ (9 Mbps) 1440 x 1080/50i/16:9, HD LP (5 Mbps) 1440 x 1080/50i/16:9, HD FX (24 Mbps) 1920 x 1080/25p/16:9, HD FH (17 Mbps) 1920 x 1080/25p/16:9, SD/STD HQ (9 Mbps) 720 x 576/50i/16:9, 4:3
Recording/Playback time	170 min (MS 32 GB, HD FX, LPCM) 530 min (Int. memory 96 GB, HD FX, LPCM)

Lens	
Zoom ratio	Sony G Lens, 10x (optical), 14x Extended Zoom, 120x Digital Zoom
Focal length	f = 3.8 mm - 38 mm (equivalent to 26.3 mm - 263 mm (16:9), 32.2 mm - 322 mm (4:3) on 35 mm lens) (The focal length is when SteadyShot mode is in Active mode Off.)
Focus	Full range auto/Manual
Image stabilizer	Optical SteadyShot™ image stabilization w/ Active mode (Wide to Tele)
Filter Diameter	37 mm

Camera Section	
Imaging device	1/2.88 type Exmor® CMOS with ClearVid pixel array
Gross pixels	Approx.6,648,000
Video Actual pixels	Approx.6,140,000 (16:9)
Minimum illumination	3 lx (Low LUX mode, 1/25 shutter)
Shutter speed	1/6 - 1/10000 (Manual Shutter Speed Control)
Iris	F1.8 - F3.4
Slow and Quick Motion	200 fps (fixed) as Smooth Slow Rec The picture quality is degraded. (fps: Field per Sec.)
White Balance	Auto, outdoor (5800K), indoor (3200K), One-push (Touch panel)

Input/Outputs	
Mic input	Stereo mini jack (x 1) ø3.5 mm
Audio input	XLR 3-pin (female) (x 2), LINE/MIC/MIC +48 V selectable
A/V Output	A/V Remote connector
Component Video Output	A/V Remote connector
Remote Conector	Stereo mini-minijack (ø2.5 mm)
USB	USB device, Mini-AB/Hi-Speed (x 1)
Headphone Output	Stereo mini jack (x 1) ø3.5 mm
HDMI output	HDMI mini connector (x 1)

Monitoring	
Viewfinder	1.1 cm (0.45 type, aspect ratio 16:9) 1 226 880 dots equivalent (852 x 3 [RGB] x 480)
Built-in LCD Monitor	8.8 cm (3.5 type, aspect ratio 16:9) 921 600 dots (1920 x 480)

Microphone	
Type	2ch Stereo microphone

Recording Media	
Internal Memory	96 GB
Removeable Media	Memory Stick PRO Duo (Mark2), Memory Stick PRO-HG Duo SD/SDHC/SDXC Memory Card (Class 4 or faster)

Supplied Accessories	
AC-L200C/D	AC Adaptor
NP-FV70	Rechargeable Battery Pack
	Power cord
ECM-XM1	Microphone
	Wind Screen
	XLR Adaptor
	Lens hood with lens cover
	Large eyecup
	Component A/V cable
	A/V connecting cable
	USB cable (mini-B)
	Accessory shoe kit
VMC-UAM1	USB Adaptor cable (for external HDD)
RM-845	Wireless Remote Commander
	Application Software (CD-ROM) (Content Management Utility)